

150076

IN THE DRAWINGS

Please replace sheet 1 of the drawings, depicting Figures 1 and 2, with the attached replacement drawing sheet.

REMARKS

In the outstanding Office Action, claims 1-50 were presented for examination. Applicant has amended claims 1, 2, 4, 6, 7, 12, 21, 26, 27, 28, 29, 31, 32, 37, 45, and 50. Applicant respectfully requests reconsideration of the claims in view of the foregoing amendments and the following remarks.

Applicant has amended the claims to more precisely claim particular aspects of the invention. Support for the amendments is found in the specification and in the original claims. Accordingly, applicant submits that no new matter has been introduced by the amendments.

Applicant notes that a replacement sheet for Figure 1 has been submitted such that Figure 1 complies with the written specification. In particular, referring to page 7, paragraph 0028, the specification identifies an axis 59 and a digital image 60. Applicant has amended Figure 1 such that the number "60" associated with the axis has been replaced with the number "59".

Claims 1, 19, 21-26, 43, and 45-50 were rejected under 35 U.S.C. § 103(a) based on Takagi et al. (U.S. Pat. No. 6,269,140, hereinafter "Takagi") in view of Claus et al. (U.S. Pat. App. Publication No. 2005/0135558, hereinafter "Claus").

Independent claim 1, as amended, is directed to a method for generating a digital image indicative of an internal anatomy of a person. Further, claim 1 recites in part:

"generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state." Independent claims 26 and 50 recite similar limitations.

Referring to Takagi, the reference is directed to an x-ray computer tomography apparatus control method. Referring to Figure 3 of Takagi, the system generates several scan sets composed of two-dimensional data 301-310. Further, Takagi indicates that it is possible to establish a synchronizing relation of phase between the CT scan (rotation of the rotary disk) and the cardiac pulsation to thereby obtain a plurality of CT images corresponding to one in the same phase of pulsations. See Takagi, column 6, lines 55-58. Further, Takagi indicates that a device for outputting a signal indicating a breath period of a lung can be provided in place of the electrocardiograph 50, and the x-ray scan speed in the lung region can be controlled synchronously with the breath period of the lung. See Takagi, column 7, lines 5-9.

Takagi, however, does not provide any teaching of generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, as recited independent claims 1, 26, and 50. In particular, although Takagi generates a plurality of scan sets, Takagi does not disclose a grouping methodology that obtains a plurality of different groups of the scan sets. Further, Takagi does not provide any teaching of the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, as recited in claims 1, 26, and 50. Further, Takagi et al does not provide any teaching of the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state, as recited in claims 1, 26, and 50. Further, the Clause reference does not provide any teaching of the foregoing limitations.

Further, because neither Takagi nor Clause provide any teaching of generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the references do not teach generating first and second 3-D digital images utilizing the first and second cross-sectional digital image groups, respectively, as recited in claims 1, 26, and 50.

Further, because neither Takagi nor Clause et al. provide any teaching of generating first and second 3-D digital images utilizing the first and second cross-sectional digital image groups, the references not teach generating a resultant 3-D digital image indicating at least a portion of the internal anatomy of the person utilizing the first and second 3-D digital images.

Accordingly, because the proposed combination of Takagi and Clause et al. do not teach each and every limitation of independent claims 1, 26, and 50, applicant submits that claims 1, 26, and 50 and dependent claims 19, 21-25, 43, and 45-49 which depend from one of claims 1 and 26 are allowable over these references.

Claims 2, 4, 27, and 29 were rejected under 35 U.S.C. § 103(a) based on Takagi in view of Claus, and in further view of Brandl et al. (U.S. Pat. No. 6,450,962, hereinafter “Brandl”). As discussed above, Takagi and Clause do not provide any teaching of the following limitations of independent claim 1, and the similar limitations of independent claim 26: "generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state." Further, Brandl does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Takagi, Claus, and Brandl does not teach each and every limitation of independent claims 1 and 26, and dependent claims 2, 4, 27, and 29 which depend from one of claims 1 and 26, applicant submits that claims 2, 4, 27, and 29 are allowable over these references.

Claims 3, 5, 7-16, 28, 30, and 32-41 were rejected under 35 U.S.C. § 103(a) based on Takagi in view of Claus, and in further view of Brandl and Yao et al. (U.S. Pat. App. Publication No. 2005/0078858, hereinafter “Yao”). As discussed above, Takagi, Clause, and Brandl do not provide any teaching of the following limitations of independent claim 1, and the similar

limitations of independent claim 26: "generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state." Further, Yao does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Takagi, Claus, Brandl, and Yao does not teach each and every limitation of independent claims 1 and 26, and dependent claims 3, 5, 7-16, 28, 30, and 32-41 which depend from one of claims 1 and 26, applicant submits that claims 3, 5, 7-16, 28, 30, and 32-41 are allowable over these references.

Claims 6 and 31 were rejected under 35 U.S.C. § 103(a) based on Takagi in view of Claus, and in further view of Caoli et al. ("Urinary Tract Abnormalities: Initial Experience with Multi-Detector Row CT Urography", herein "Caoli"). As discussed above, Takagi and Clause do not provide any teaching of the following limitations of independent claim 1, and the similar limitations of independent claim 26: "generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state." Further, Caoli does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Takagi, Claus, and Caoli does not teach each and every limitation of independent claims 1 and 26, and dependent claims 6 and 31 which

depend from one of claims 1 and 26, applicant submits that claims 6 and 31 are allowable over these references.

Claim 17 was rejected under 35 U.S.C. § 103(a) based on Takagi in view of Claus, and in further view of Yanof et al. (U.S. Pat. App. Publication No. 2003/0188757, herein “Yanof”). As discussed above, Takagi and Clause do not provide any teaching of the following limitations of independent claim 1, and the similar limitations of independent claim 26: "generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state." Further, Yanof does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Takagi, Claus, and Yanof does not teach each and every limitation of independent claim 1, and dependent claim 17 which depends from claim 1, applicant submits that claim 17 is allowable over these references.

Claims 18, 20, 42, and 44 were rejected under 35 U.S.C. § 103(a) based on Takagi in view of Claus, and in further view of Yao. As discussed above, Takagi and Clause do not provide any teaching of the following limitations of independent claim 1, and the similar limitations of independent claim 26: "generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state." Further, Yao does not provide any teaching of the foregoing limitations.

second respiratory state." Further, Yao does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Takagi, Claus, and Caoli does not teach each and every limitation of independent claims 1 and 26, and dependent claims 18, 20, 42, and 44 which depend from one of claims 1 and 26, applicant submits that claims 18, 20, 42, and 44 are allowable over these references.

In view of the foregoing amendments and remarks, applicant respectfully submits that the instant application is in condition for allowance. Such action is most earnestly solicited. If for any reason the Examiner feels that consultation with applicant's attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below for an interview.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0845.

Respectfully Submitted,

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